Precision Effects v. Precision Munitions

BG Philip Coker, Director of Capabilities Developments
US Army TRADOC Futures Center

“Challenging the Norm”

***Transformation** -- more than modernization; a holistic change to create a strategically responsive force that is dominant across the full spectrum of military operations.*

“I want to ride with risk-takers, I want thinkers who can give me the great ideas. And if you get one good idea out of 20, that’s a great idea that you might not have had if your thought processes are narrow and if you do not reward creativity.”

- GEN Kevin P. Byrnes
  Oct. 8, 2003

354702

"Nature of this Opportunity on Precision Effects"

Precision Effects ***-- ability to more rapidly and accurately locate and attack targets, providing the required operational responsiveness and the desired effects (lethal and non-lethal) on targets with the greatest efficiency.***

- Precision Effects Study Senior Advisory Group (SAG) definition

Expectation from the Precision Effects SAG was that increased Precision Effects result in logistical efficiencies at a reasonable cost, as well as an increased ability to meet restrictive Rules of Engagement (ROE) requirements

Current Army NLOS Munitions Capable f Providing Precision and Near-Precision Effec

Hit to kill precision

Accuracy

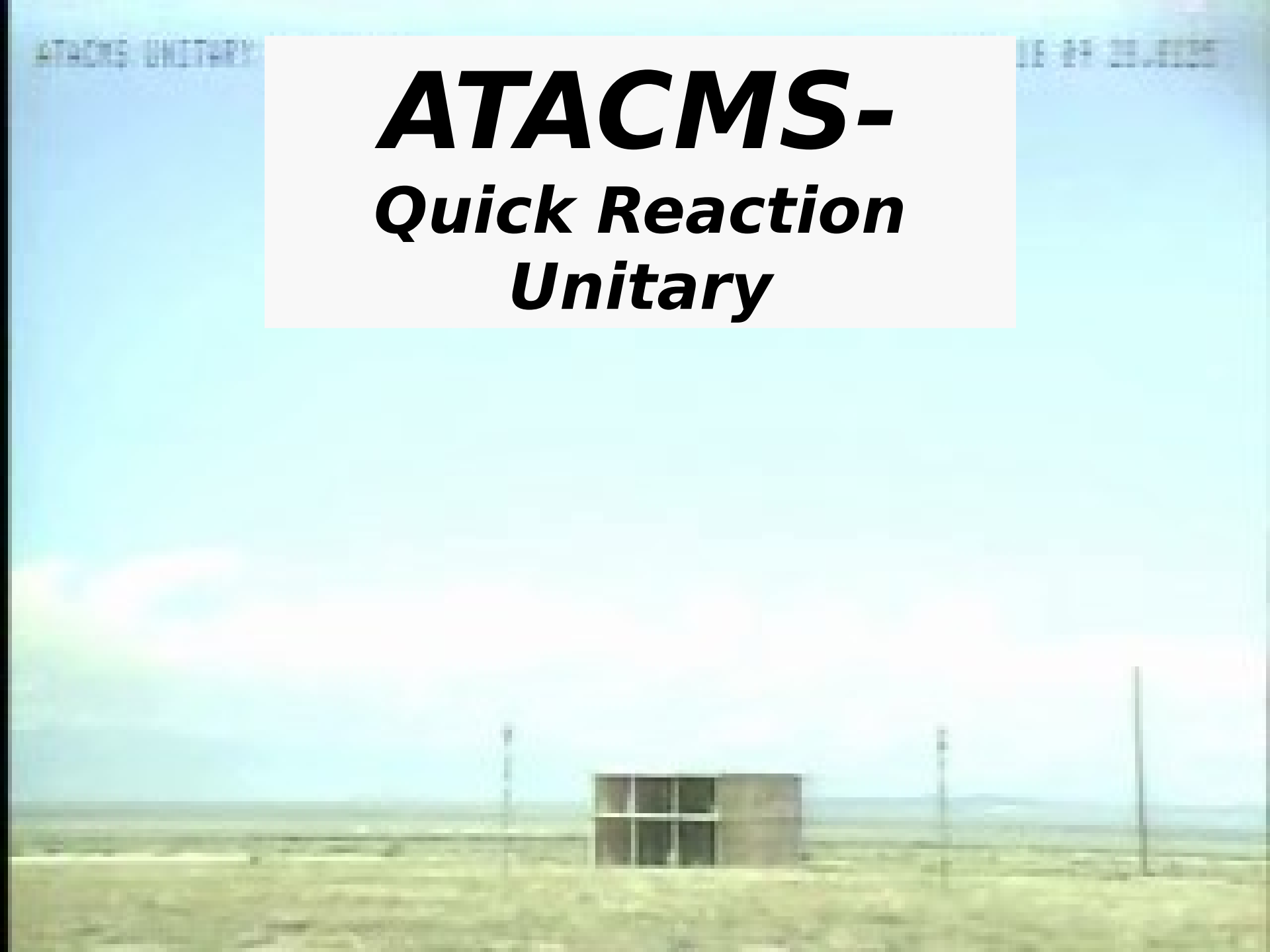
- **Bat – (acoustic and IR) < 5 M**
- **Semi-active Laser (SAL) Bat (laser guided) < 5 M**
- **Copperhead – (laser guided) < 5 M**
- **Sense and Destroy Armor (SADARM) – (MMW and IR) < 5 M**
- **Precision Guided Mortar Munition (PGMM) < 5 M**

Accurate delivery

- **Guided MLRS (DPICM) – area effect (bomblets) < 15 M**
- **Guided MLRS (Unitary) – 200 pound-class warhead < 10 M**
- **Army Tactical Missile System (TACMS) – area effect (bomblets) <150 M**
- **Army TACMS Block IA – area effect (bomblets) <100 M**
- **Army TACMS Quick Reaction Unitary – 500 pound-class warhead < 10 M**
- **Excalibur – 155mm High Explosive < 10 M**

Guided MLRS-Unitary

ATACMS-
Quick Reaction Unitary



Excalibu
r

Challenge is No Longer Accuracy of Munitions

- **Quickly develop a usable target location with great accuracy**
- **Rapidly close sensor-to-shooter link**
- **Efficiently clear fires**
- **Timely and accurate battle damage assessment**

Potential Future Precision and Near-Precision Capabilities

- **Course Correcting Fuze / Precision Guidance Kit**
- **Kinetic Energy Artillery with Precision and Extended Range (KEAPER) – enhanced capability on the order of 500 KM range and 2-4 meter accuracy**
- **Advanced Hypersonic Weapon (AHW) - transformational capability on the order of 6,000 KM range with 35 minute time-of-flight and < 10 meter accuracy**
- **Counter Rocket, Artillery and Mortar (C-RAM)**

C-RAM

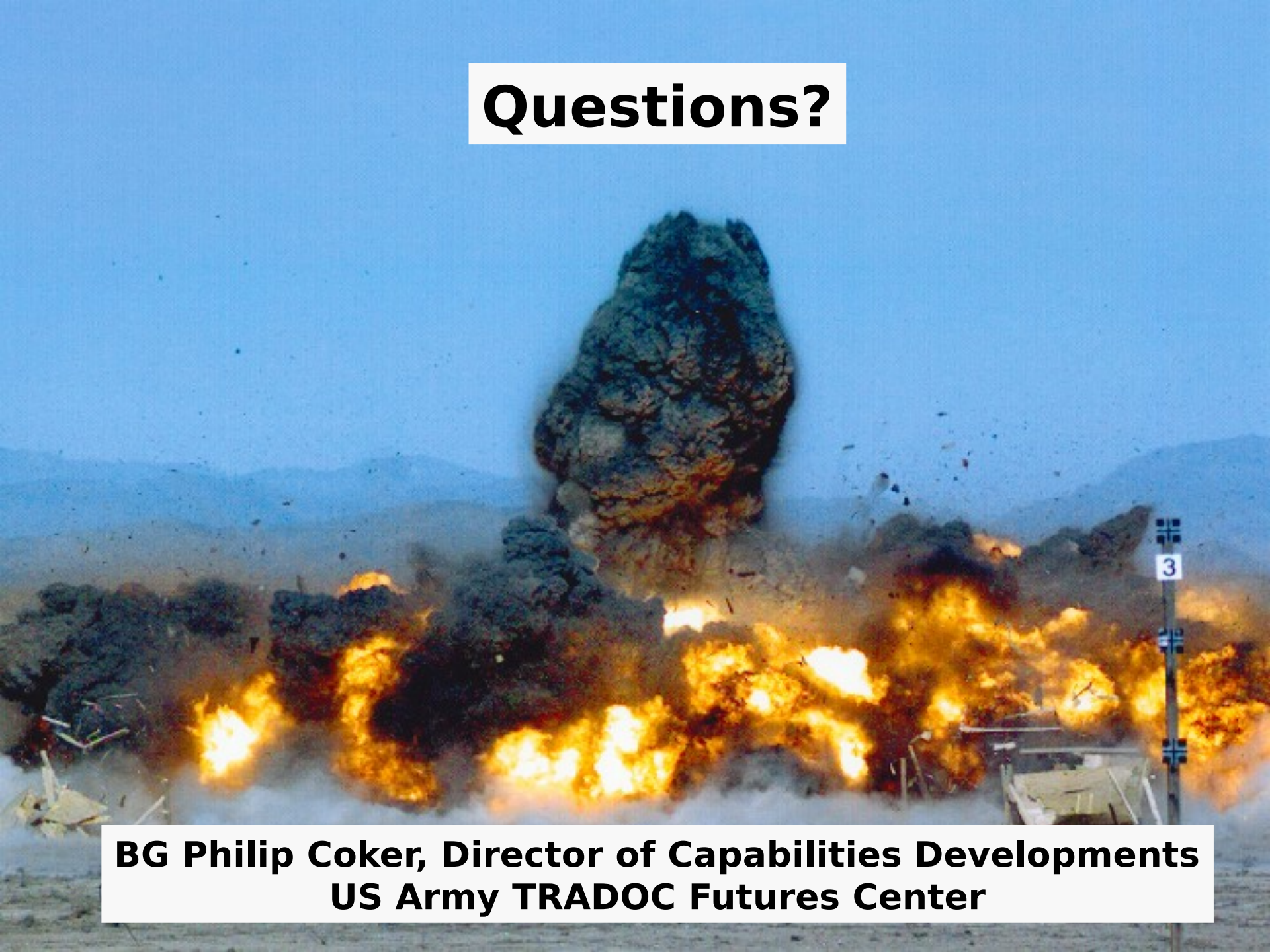
PRECISION

PROTECTION

MASS

MANEUVER

Questions?



BG Philip Coker, Director of Capabilities Developments
US Army TRADOC Futures Center